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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte LEWIS ROBERT VARNEY, LAURENCE R. LIPSTONE,
WILLIAM CROWDER, ANDREW SWART,
and CHRISTOPHER NEWTON

_____

Appeal 2018-001702
Application 14/307,380
Technology Center 2400

_____

Before IRVIN E. BRANCH, MICHAEL M. BARRY, and
SCOTT RAEVSKY, *Administrative Patent Judges.*

BRANCH, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE[1]

Pursuant to 35 U.S.C. § 134(a), Appellant[2] appeals from the
Examiner's decision to reject claims 1–6, 8–14 and 16–22. *See* Final Act. 1.
We have jurisdiction under 35 U.S.C. § 6(b). An oral hearing was held on
January 28, 2020. A transcript of the oral hearing is being prepared and will
be entered into the record in due course.

We AFFIRM

CLAIMED SUBJECT MATTER

The claims are directed to automated learning of peering policies for
popularity driven replication in a content delivery framework. Claim 1,
reproduced below with disputed limitations emphasized in *italics*, is
illustrative of the claimed subject matter:

> 1.   A computer-implemented method in a content delivery
> (CD) network, the method operable on one or more devices in
> said CD network comprising hardware including memory and
> at least one processor, the method comprising:
>   (A) collecting information about at least one resource,
> said information having been determined based on (i) a set of
> features of said at least one resource and on (ii) information
> about previous requests for said at least one resource;
>   (B) determining a computable function of said set of
> features of said at least one resource, said computable function
> having been determined based on said information about said at

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[1] We refer to the Specification, filed June 17, 2014 ("Spec."); Final Office
Action, mailed October 6, 2016 ("Final Act."); Appeal Brief, filed May 9,
2017 ("Appeal Br."); and Examiner's Answer, mailed October 5, 2017
("Ans.").

[2] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R.
§ 1.42. Appellant identifies the real party in interest as Level 3
Communications, LLC. Appeal Br. 2.

least one resource collected in (A), said function defining a peering policy for said at least one resource; and

(C) providing said function to at least one CD service endpoint in a cluster or supercluster,

wherein the at least one CD service endpoint in the cluster or supercluster uses the function to determine a number of cache responsible nodes in the cluster or supercluster for the one or more resources.

RELATED PROCEEDINGS

Appellant states:

Appeals have been filed or are being filed in the following Applications that share a priority Application (Provisional Application 61/737,072, filed December 13, 2012) with the present Application: 13/715,590; 13/715,747; 13/802,093; 13/802, 143; 13/802,335; 14/088,356; 14/088,358; 14/088,367; 14/088,542; 14/303,389; and 14/578,402.

Appeal Br. 2.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Murphy	US 2010/0274765 A1	Oct. 28, 2010
Whyte	US 2012/0159558 A1	June 21, 2012
Newton	US 2011/0276679 A1	Nov. 11, 2011

REJECTIONS

Claims 1–6, 8–14, and 16–22 are rejected under 35 U.S.C. § 101 as being directed to non–statutory subject matter. Final Act. 3.

Claims 1–6, 8–14, and 16–22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Final Act. 4.

Claims 1–5, 8–14, and 16–22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Newton and Whyte. Final Act. 5–15.

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Newton, Whyte, and Murphy. Final Act. 15.

We review the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). We have considered only those arguments Appellant actually raised in the Briefs. Any other arguments Appellant could have made but chose not to make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellant's arguments. To the extent consistent with our analysis herein, we adopt as our own the findings and reasons set forth by the Examiner in (1) the action from which this appeal is taken (Final Act. 3–27) and (2) the Examiner's Answer in response to Appellant's Appeal Brief (Ans. 2–26) and concur with the conclusions reached by the Examiner. We highlight the following for emphasis.

35 U.S.C. § 101

Section 101 defines patentable subject matter: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The U.S. Supreme Court, however, has "long held

that this provision contains an important implicit exception" that "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quotation omitted). "Eligibility under 35 U.S.C. § 101 is a question of law, based on underlying facts." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018).

To determine patentable subject matter, we undertake a two-part test. "First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts" of "laws of nature, natural phenomena, and abstract ideas." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014). "The inquiry often is whether the claims are directed to 'a specific means or method' for improving technology or whether they are simply directed to an abstract end-result." *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (citation omitted). A court must be cognizant that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas" (*Mayo*, 566 U.S. at 71), and "describing the claims at . . . a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016). Instead, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

If the claims are directed to an abstract idea or other ineligible concept, then we continue to the second step and "consider the elements of each claim both individually and 'as an ordered combination' to determine

whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 79, 78). The Court describes the second step as a search for "an 'inventive concept'—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" *Id.* (quoting *Mayo*, 566 U.S. at 72–73).

In 2019, the Office published revised guidance on the application of § 101. USPTO, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Revised Guidance" or "Guidance"); *see also* USPTO, *October 2019 Update: Subject Matter Eligibility*, available at https://www.uspto.gov/sites/default/files/documents/ peg_oct_2019_update.pdf (Oct. 17, 2019) ("Oct. 2019 Guidance"). Under the Revised Guidance, we look to whether the claim recites

    (1)   a judicial exception, such as a law of nature or any of the following groupings of abstract ideas:

        (a)   mathematical concepts, such as mathematical formulas;

        (b)   certain methods of organizing human activity, such as a fundamental economic practice; or

        (c)   mental processes, such as an observation or evaluation performed in the human mind;

    (2)   any additional limitations that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)); and

(3) any additional limitations beyond the judicial exception that,

alone or in combination, were not "well-understood, routine,

conventional" in the field (*see* MPEP § 2106.05(d)).

See Revised Guidance, 84 Fed. Reg. at 52, 55, 56. Under the Revised

Guidance, if the claim does not recite a judicial exception, then it is eligible

under § 101, and no further analysis is necessary. *Id.* at 54. Similarly, under

the Guidance, "if the claim as a whole integrates the recited judicial

exception into a practical application of that exception," then no further

analysis is necessary. *Id.* at 53, 54.

Here, the claims recite a computer-implemented method (claim 1), a

system (claim 17), and an article of manufacture (claim 20). Thus, the

claims fall within one of the four statutory categories, so we must determine

if the claims are directed to a judicial exception.

USPTO Step 2A, Prong 1

In connection with Step 2A, the Examiner determines "[t]he claims

are directed to the abstract idea of comparing new and stored information

and using rules to identify options." Final Act. 21; *see SmartGene, Inc. v.*

Adv. Biological Labs., SA, 555 Fed. Appx. 950, 955 (Fed. Cir. 2014)

(nonprecedential) ("Whatever the boundaries of the 'abstract ideas'

category, the claim at issue here involves a mental process excluded from

section 101: the mental steps of comparing new and stored information and

using rules to identify medical options."). Claim 1 recites "(A) collecting

information about at least one resource, said information having been

determined based on (i) a set of features of said at least one resource and on

(ii) information about previous requests for said at least one resource" and

"(B) determining a computable function of said set of features of said at least

one resource, said computable function having been determined based on said information about said at least one resource collected in (A), said function defining a peering policy for said at least one resource." The Examiner determines that information is collected in step A ("collecting information about at least one resource, said information having been determined based on (i) a set of features of said at least one resource and on (ii) information about previous requests for said at least one resource"). The Examiner determines that the "new information" collected in step A is, in step B, compared—along with "stored information" (*see* Spec. ¶ 503 ("default policy")—and rules are used (*see* Spec. ¶ 507 ("machine learning techniques")) to identify options ("determining a computable function . . . defining a peering policy").

We agree with the Examiner's determination. Consistent with the Examiner's determination, we determine that at least steps (A) and (B), as well as the phrase, "uses the function to determine a number of cache responsible nodes in the cluster or supercluster for the one or more resources" of the wherein clause also recite observation and evaluation capable of being performed in the human mind, a mental process, which is a type of abstract idea under the Guidance. A claim recites a mental process when the claim encompasses acts people can perform using their minds or pen and paper. *See, e.g.*, *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011) (determining that a claim whose "steps can be performed in the human mind, or by a human using a pen and paper" is directed to an unpatentable mental process). This is true even if the claim recites that a generic computer component performs the acts. *See, e.g.*, *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir.

2015) ("Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person's mind."); *see also* 2019 Eligibility Guidance 84 Fed. Reg. at 52 n.14 ("If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind.").

Here, under the broadest reasonable interpretation, the steps of the claim can be done mentally or on paper. For example, a person (such as a CDN network administrator) can collect information about a resource by thinking about the features of the resource or information about previous requests for the resource. The CDN network administrator could then think of a computable function based on that information—such as by coming up with a peering policy in his mind or on paper. He could then provide that function to at least one CD service endpoint by writing down an instruction to a subordinate to download the peering policy to the endpoint. Further, the network administrator or subordinate could use the function to determine a number of cache responsible nodes in the cluster or supercluster for the resource by, for example, looking at a display showing the cache responsible nodes and adding up the number of those nodes in their mind.

As an example consistent with the Examiner's "product placement" determination (Non-Final Act. (May 18, 2016) 5 ("Claims 1, 17, 22 are directed to the abstract idea of product placement.")) , from step (A), as recited, the subject resource could be any product available in a grocery store and the collected information could be the size and shape of the

product and its popularity (i.e., features of the product and information about previous requests). Collecting information is a mental process because a human can collect information merely through observation. From step (B), the "peering policy" is analogous to a product placement rule that dictates tending to place smaller, more popular products in higher traffic areas of the store. This is a mental process because a human can formulate such a policy by thinking about it. It then follows that step (C) ("providing said function to at least one CD service endpoint in a cluster or supercluster") amounts to instructing grocery stores in a chain to follow the "peering policy" when determining where to place products. *See* Spec. ¶ 496 ("the more popular a resource, and the smaller it is, the more preferable it is to replicate that resource"). These activities are directed to observation and evaluation capable of being performed in the mind of a human, a type of abstract idea under the Guidance.

Appellant argues "[t]he Examiner does not explain how the claims supposedly relate to the abstract idea of '**of product placement**' (none of the claims recites '**product placement**')." Appeal Br. 9. Even though this argument appears responsive to an earlier office action, rather than the current rejection (*see* Ans. 4), we have explained how the abstract idea identified by the Examiner similarly relates to "**product placement**." Accordingly, this argument does not persuade us of error.

Appellant also argues "[t]he Examiner ignores the claim language and fails to address the actual claim limitations or the claims as a whole" and "[e]ven if, *arguendo,* the claims are directed to '**product placement**,' as the Examiner alleges (and which the Applicant disputes), the claims are not directed to one of the judicial exceptions to patentability." Appeal Br. 10.

Appellant fails to identify anything the Examiner failed to consider in the claims "as a whole." *See generally id.* at 10–11. Moreover, we have identified a judicial exception under the Guidance.

Accordingly, for the reasons discussed above, claim 1 recites mental processes that are considered to be an abstract idea under the Guidance.

USPTO Step 2A, Prong 2

Under the Revised Guidance, we now must determine if additional elements in the claims integrate the judicial exception into **a practical application** (*see* MPEP § 2106.05(a)–(c), (e)–(h)). Here, we discern no additional element (or combination of elements) recited in Appellant's claims that integrate(s) the judicial exception into a practical application. *See* 84 Fed. Reg. at 54–55.

In particular, claim 1 requires only generalized capabilities and functionalities of "[a] computer-implemented method in a content delivery (CD) network, the method operable on one or more devices in said CD network comprising hardware including memory and at least one processor," "at least one CD service endpoint in a cluster or supercluster," and "wherein the at least one CD service endpoint in the cluster or supercluster . . . ." According to Appellant's Specification, "[o]ne of ordinary skill in the art will readily appreciate and understand, upon reading this description, that the various processes described herein may be implemented by, *e.g.,* appropriately programmed general purpose computers, special purpose computers and computing devices." Spec. ¶ 1385.

Appellant argues that the claims are like those found patent eligible in *DDR Holdings, LLC v. Hotels.com et al.,* 773 F.3d 1245, (Fed. Cir. 2014) by "'provid[ing] a compact responsibility-based peering policy that can be

executed at or near a cluster or super-cluster, with a minimal amount of state used in the computation of the policy itself.'" Appeal Br. 12 (quoting Spec. ¶ 497).

The Examiner responds that "in DDR Holdings the Court considered that applying the analog practice to the digital realm required an inventive solution, but no such inventive solution is required here" and "in DDR Holdings the claim specifically claimed the inventive act, while here the claim merely states the application on the computer."

We agree with the Examiner. Executing the peering policy near the cluster or super-cluster with a minimal amount of state used in the computation of the policy itself is an improvement to the functioning of the abstract idea and not an improvement to the computer. As the Examiner correctly points out, merely performing the abstract idea with a computer, as in *Alice* and other cases in which computer-implemented processes were found ineligible, is "insufficient under 101." Ans. 8; *see SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018) (The abstract idea itself cannot supply eligibility, "no matter how groundbreaking the advance.").

Appellant also argues that "*Enfish* compels the conclusion that the claims, viewed in light of the specification, are not directed to an abstract idea, and thus cover patentable subject matter" because "[t]he claims, like those in *Enfish*, are directed on their face to an improvement to computer functionality itself." Appeal Br. 13–14.

We are not persuaded. Rather, we agree with the Examiner's determination as follows:

> the computer is not improved. The computer delivers content just as it would had a human being made the same functional calculation that a computer did. The computer is simply being used for its conventional information-processing capability. The computer does not process faster or store better, nor does "determine a computable function" even improve the resulting experience to the end user, because there is no limitation that requires or even suggests that the peering policy is better than a default policy or any improvement whatsoever.

Ans. 9.

For the reasons discussed, the claims do not include additional elements that integrate the judicial exception into a practical application because the additional elements: (1) do not improve the functioning of a computer or other technology; (2) are not applied with any particular machine (except for a generic computer); (3) do not effect a transformation of a particular article to a different state; and (4) are not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. *See* MPEP § 2106.05(a)–(c), (e)–(h). Instead, any improvement is to the underlying idea of "comparing new and stored information and using rules to identify options." Thus, claim 1 does not integrate the judicial exception into a practical application.

USPTO Step 2B

Because claim 1 recites a judicial exception and does not integrate that exception into a practical application, we reach the issue of whether the claim adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field. Revised Guidance, 84

Fed. Reg. at 56.

Appellant has not identified any specific limitation or combination of limitations in claim 1 that is not "well-understood, routine, conventional" in the field as per MPEP § 2106.05(d). Instead, Appellant describes the invention in a manner consistent with its being "well-understood, routine, [and] conventional," such that the claimed server, processors, and memory of claim 1 requires no more than a general-purpose computer processor and generic memory executing computer program instructions on information in a generic memory. *See* Spec. ¶¶ 1383–1408. Consistent with the Specification, the claim 1 "one or more devices in said CD network comprising hardware including memory and at least one processor," as well as the claims as whole, fails to go beyond that which is well-understood, routine, and conventional. This is indicative of the absence of an inventive concept where the claims simply append well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. Revised Guidance, 84 Fed. Reg. at 56. Furthermore, the functionalities recited by claim 1 are recited at a high level of generality that do not set forth limited rules for implementing the functionalities sufficient to confer patent eligibility.

Therefore, we conclude claim 1, viewed "both individually and as an ordered combination," does not recite significantly more than the judicial exception to transform the claim into patent-eligible subject matter. *See Alice*, 573 U.S. at 217 (internal quotations omitted) (quoting *Mayo*, 566 U.S. at 79).

Accordingly, for the reasons discussed, claim 1 is directed to a mental process, which is an abstract idea. Furthermore, the claims do not recite

limitations that amount to significantly more than the abstract idea itself.
We, therefore, sustain the rejection of independent claim 1 under
35 U.S.C. § 101 and, for the same reasons, the rejection of independent
claims 17 and 20, together with the rejection of dependent claims 2–6, 8–14,
16, 18, 19, 21, and 22, which are not argued separately with particularity.

35 U.S.C. § 112, FIRST PARAGRAPH

All pending claims stand rejected under 35 U.S.C. § 112, first
paragraph, as failing to comply with the written description requirement.
Final Act. 4. The independent claims recite "determining a computable
function of said set of features of said at least one resource, said computable
function having been determined based on said information about said at
least one resource collected in (A), said function defining a peering policy
for said at least one resource." The Examiner finds that the "function is
undescribed," "the specification fails to prove that applicant possessed every
function based on any information about previous requests," and therefore,
Appellant "fails to possess the breadth of his function." *Id.* The Examiner
further finds as follows:

> Step B of Claim 1 is a claim to all functions one could
> make based on underlying "information about at least one
> resource." **MPEP 2161.01** states that "generic claim language
> in the original disclosure does not satisfy the written description
> requirement if it fails to support the scope of the genus claimed."
> The MPEP notes that "original claims may fail to satisfy the
> written description requirement when the invention is claimed
> and described in functional language." "Examiner should
> determine whether the specification discloses the computer and
> the algorithm (e.g. the necessary steps and/or flowcharts) that
> perform the claimed function in sufficient detail such that one of
> skill in the art can reasonably conclude that the inventor invented

the claimed subject matter." Applicant simply claims a function. Applicant does not provide an algorithm for achieving that function, because Applicant admits that a general algorithm does not exist and even system specific functions (i.e. functions already limited by the particular features of a concrete applied system) are subject to a user's design choice and can only be approximated after machine learning. Applicant is not in possession of the full breadth of "determining a computable function . . . said function defining a peering policy for said at least one resource."

Id. at 18.

Appellant argues error because Appellant's Specification "teaches how to determine such a computable function." Appeal Br. 15 (citing Spec. ¶ 449). Appellant argues further as follows:

The specification does not have to teach how to make the "best" solution. To comply with 35 U.S.C. l 12(a) or pre-AIA 35 U.S.C. 112, first paragraph, it is not necessary to "**enable** one of ordinary skill in the art to make and use a perfected, commercially viable embodiment absent a claim limitation to that effect." *CFMT, Inc. v. Yieldup Int 'l Corp.,* 349 F.3d 1333, 1338, 68 USPQ2d 1940, 1944 (Fed. Cir. 2003).

Nor does the specification have to teach how to make *every* solution. **The enablement requirement** is met if the description **enables** any mode of making and using the claimed invention. *Engel Industries, Inc. v. Lockformer* Co., 946 F.2d 1533 (C.A.Fed. (Mo.), 1991) citing *Chemcast Corp. v. Arco Indus. Corp.,* 913 F.2d 923, 929 (Fed.Cir.1990).

. . .

Appellant respectfully submits that those of ordinary skill in the art, upon reading this description, **would know how to determine** such a function using the detailed methodology for determining the function described in the application as filed at ¶¶ 00503–00508.

Id. at 16–17 (emphasis added in bold).

Appellant thus argues that the claims are enabled. *Id.* at 14–17; *id.* at 17 ("Using the claimed approach, a function is determined, per resource, that may be executed at a CD service in a cluster or supercluster to determine the number of cache responsible nodes in the cluster or supercluster for the resource.").

Appellant's arguments miss the basis of the rejection, namely that the basis of the rejection is for lack of written description, rather than lack of enablement. *See* Ans. 10–19. The question is not whether *one of skill in the art* is enabled to determine such as a function. Rather, the questions is whether the Applicant has demonstrated written description support for *programming a computer* to determine a computable function, not merely execute the sole enabled computable function.

The Examiner responds, and we agree, as follows:

> [MPEP 2161.01] states . . . ["]if one skilled in the art would know how to program the disclosed computer to perform the necessary steps described in the specification to achieve the claimed function and the inventor was in possession of that knowledge, the written description requirement would be satisfied." Examiner asserts that no necessary steps for performing the claimed function are disclosed, because the claimed function is not limited except by basing it on information, and thus reference to paras. 503–508 are not a disclosure of 'necessary" steps. The Spec does not define the "determination" as requiring those steps, and[,] absent that[,] limitations from the Specification are not to be read into the claims. Examiner asserts that[,] to the extent that steps are disclosed, those steps are not described in sufficient detail because they do not disclose where to start, how to modify the start position or how to come to a conclusion for the peering policy - they simply order one of skill to come up

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with a starting place, modify it in some way, and perform some
unknown truncation to generate the function.

Ans. 17–18. The Examiner cites *LizardTech*[3] for the proposition that "a
specification cannot always support expansive claim language and satisfy
the requirements of 35 U.S.C. 112 'merely by clearly describing one
embodiment of the thing claimed.'" MPEP § 2161.01 (quoting *LizardTech*
424 F.3d at 1346). The Examiner thus finds that Appellant's disclosure of a
specific computable function is insufficient to satisfy the written description
requirement absent a disclosure of how to determine such a function
generically. *See* Ans. 10–19.

     We are persuaded by the Examiner's finding, which Appellant does
not persuasively rebut.[4] Thus, on this record, we are unpersuaded of error,
and we sustain the rejection of all pending claims as lacking written
description support.

35 U.S.C. § 103

     Appellant argues the obviousness rejections based on claim 1. Appeal
Br. 18–20. Appellant contends that Whyte does not teach or suggest
"wherein the at least one CD service endpoint in the cluster or supercluster
uses the function to determine a number of cache responsible nodes in the
cluster or supercluster for the one or more resources." *Id.* at 19–20.
Appellant contends "Whyte's cache has no idea and makes no determination
about whether any other cache has any responsibility for any resource, [nor]

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[3] *LizardTech v. Earth Resource Mapping*, 424 F. 3d 1336 (Fed. Cir. 2005).
[4] Notably, Appellant did not file a Reply Brief.

does it know or make any determination about the number of caches that may have any responsibility for any resource." *Id.* at 20.

The Examiner finds that "a single device can constitute a supercluster." Ans. 24 (citing Spec. ¶ 427). We note that the claim encompasses only one CD service endpoint ("at least one CD service endpoint in the cluster or supercluster") and only one resource ("the one or more resources"). The Examiner finds that "wherein the at least one CD service endpoint in the cluster or supercluster uses the function to determine a number of cache responsible nodes in the cluster or supercluster for the one or more resources" reads on Whyte's disclosure of a dispatcher in a supercluster determining whether and which caches within the supercluster are cache responsible nodes. *Id*. at 22 (citing Whyte Fig. 5).

We are persuaded by the Examiner's unrebutted finding.

Accordingly, we are unpersuaded of error in the Examiner's rejection of claim 1, and of the rejections of the remaining claims, which Appellant argues on the same basis.

DECISION SUMMARY

We affirm the Examiner's decision to reject the claims as follows:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–6, 8–14, 16–22	101	Eligibility	1–6, 8–14, 16–22	
1–6, 8–14, 16–22	112	Written Description	1–6, 8–14, 16–22	
1–5, 8–14, 16–22	103	Newton, Whyte	1–5, 8–14, 16–22	
6	103	Newton, Whyte, Murphy	6	
Overall Outcome:			1–6, 8–14, 16–22	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED